DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-025974
Date Inspected: 02-Jul-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	N / A			**CWI Present:**	☐ Yes	☑ No	
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Approved WPS:**	☐ Yes	☐ No	☑ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Segment

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

BLASTING INSPECTION

Segment 14W
This QA Inspector performed a preliminary random visual inspection on OBG Segment 14W at cross beam side, bottom plate, edge plate & floor beam, after the grit blast of the external components of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ABF QC personnel are aware of these areas and were present during the inspection. The defects were

1. At PP126 (W) cross beam side, a incomplete welding on the Floor Beam (FB3321A) to side plate (SP3141C).
2. In between PP125 and PP125.5 cross beam side, a base metal gouge was visibly observed on the Side Plate (SP3141B). See the attached the picture.
3. At PP125.5 (E) cross beam side, a dent on the Side Plate (SP3140B)
4. In between PP125 and PP124.5 cross beam side, a base metal gouge was visibly observed on the Bottom Plate (BP3094A).

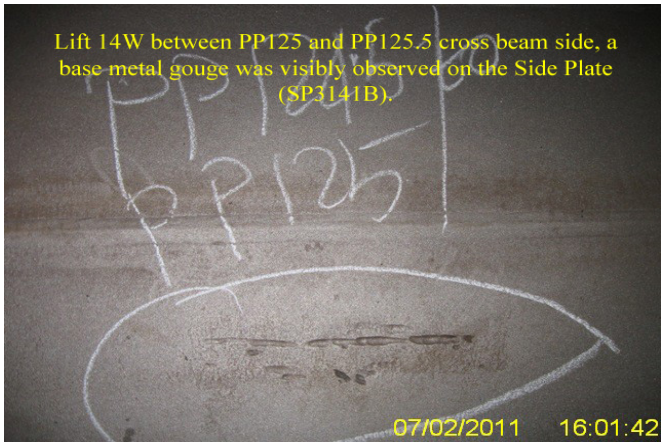
5. At PP125.5 (E) cross beam side, a base metal gouge was visibly observed on the Side Plate (SP3140A).
6. In between PP125 and PP124.5 cross beam side, four locations base metal gouge was visibly observed on the Edge Plate (EP3030A). See the attached the picture.
7. At PP128.7 (W) cable side, no welding on edge plate (EP3029A) to floor beam (FB3345A).
8. At PP128.3 (W) cable side, near to cope hole location incomplete welding on Floor Beam (FB3342A) Vertical stiffer to SA3416A weld.
9. At PP128 (W) cable side, near to cope hole location incomplete welding on Floor Beam (FB3336A) to Longitudinal Diaphragm (LD3051A) weld.
10. At PP128 (E) cable side, excess weld metal on Floor Beam (FB3336A) flange to Deck Panel Diaphragm (DP3171A) weld.
11. At PP127.5 (W) cable side, near to cope hole location incomplete welding on Floor Beam (FB3330A) stiffener to Longitudinal Diaphragm (LD3051A) weld.
12. In between PP126.5 and PP127 cable side, incomplete welding and under fill on Side plate (SP3144B) RS stiffener welds.
13. At PP127 (W) cable side, a weld metal grinding was visibly observed on floor beam (FB3325A) to SA8502A.

14. At PP126.5 (E) cable side, a base metal deep gouge was visibly observed on the longitudinal diaphragm (LD3049B).
15. At PP126.5 (E) cross beam side, incomplete welding on edge beam (EB3056A) to Floor Beam (FB3319A).
16. In between PP126 and PP126.5 cross beam side, a base metal repair needs to be done on Side Plate (SP3140C).

17. In between PP126 and PP126.5 cross beam side, two location base metal repair need to be done on Side Plate (SP3141C).
18. In between PP126 and PP126.5 cross beam side, a base metal gouge was visibly observed on the Floor Beam (FB3321A).
19. At PP 128.7, cluster porosity on weld SP to 5th I-rib from W16 location.
20. Near PP128 west side, porosity observed at three locations on SP to I-rib (5th, 6th and 10th I-rib from W19 location) weld.
21. At PP 127 East side, Weld joint number SEG3020AZ-422 slag and temporary attachment were not removed properly at underneath of weld.
22. At PP127.5 west side, weld joint number SEG3020AZ-418 welding incomplete.
23. At PP 127.5 west side, weld joint number SEG3020AZ-416 slag not removed properly at underneath of weld joint.
24. In between PP 128 to PP 128.3, splice plate X4962C base metal damaged in between 11th and 12th stiffener from W16 location.
25. At PP 128.3 east side, deep gouge on weld joint number SEG3020E-051 near 6th I-rib from W4 location.
26. At PP 128 west side, base metal gouged on FB3341A near W4 location.
27. At PP127 (E) cable side, deep gouges on FB3327A near W3 location.
28. At PP 127 (E) cross beam side, SP to I-rib (1st, 4th, 5th and 6th from W4 location) welding incomplete.
29. At PP 127 (E) cross beam side, base metal of SP 3141D damaged in between 6th and 7th I-rib from W16 location.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer